CLAIMS

1. An edge smoothing filter for correcting defects in a black white image, comprising:

a system for processing blocks of pixels in the black white image, wherein each block comprises one center pixel and eight exterior pixels; and

an algorithm that examines each block of pixels, wherein the algorithm overwrites the value of the center pixel if:

all three pixels along a first edge share a first value; and

all three pixels along an opposing edge share a second value that is opposite of the first value; and

the two exterior pixels residing between the first and second edge share a common value.

2. The edge smoothing filter of claim 1, wherein the center pixel is overwritten with the common value of the two exterior pixels residing between the first and second edge.

3. The edge smoothing filter of claim 1, wherein the black white image comprises character data.

4. A method for correcting defects in a black white image, comprising:

selecting a block of pixels from the black white image, wherein the block comprises one center pixel and eight exterior pixels;

examining the block of pixels to determine if:

all three pixels along a first edge share a first value, and

all three pixels along an opposing edge share a second value that is opposite of the first value, and

two exterior pixels residing between the first and second edge share a common value; and

if the above conditions are met, overwriting the value of the center pixel with the common value of the two exterior pixels between the first and second edge.

5. The method of claim 4, wherein the steps are repeated for different blocks of pixels in the black white image.

6. A program product stored on a recordable medium for correcting defects in a black white image, comprising:

means for selecting a block of pixels, wherein the block comprises one center pixel and eight exterior pixels; and

means for examining the block of pixels to determine if:

all three pixels along a first edge share a first value, and

all three pixels along an opposing edge share a second value that is opposite of the first value, and

two exterior pixels residing between the first and second edge share a common value; and

means for overwriting the center pixel with the common value of the two exterior pixels if all conditions of the examining means are met.

7. A character recognition system that processes character data from a black white image, comprising:

an edge smoothing filter that examines blocks of pixels in the black white image to determine if an indent or protrusion defect exists, and if so corrects the defect in a filtered image; and

a recognition engine examines the filtered image and extracts character information.

8. The character recognition system of claim 7, wherein the edge smoothing filter includes:

a system for selecting blocks of pixels comprising one center pixel and eight exterior pixels; and

an algorithm that examines each block of pixels, wherein the algorithm overwrites the value of the center pixel if:

all three pixels along a first edge share a first value; and

all three pixels along an opposing edge share a second value that is opposite of the first value; and

two exterior pixels residing between the first and second edge share a common value.

9. The character recognition system of claim 8, wherein the center pixel is overwritten with the common value of the two exterior pixels residing between the first and second edge.